# Small Business Administration Office of Investment and Innovation

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program

Program Overview & Key Changes with Reauthorization

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# Mission of the SBIR/STTR Program

 To support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy... one small business at a time.



# Goals of the SBIR/STTR Program

- Meet Federal research and development needs
- Increase private-sector commercialization of innovations derived from Federal research and development funding
- Stimulate technological innovation
- Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged persons



# SBIR/STTR Program History

- The SBIR program started as a pilot program at the NSF in the late-1970's
- Three legislative acts have been passed that govern its existence and execution
  - The Small Business Innovation Development Act of 1982
  - The Small Business Research and Development Enhancement Act of 1992
  - The Small Business Innovation Research Program Reauthorization Act of 2000
- The program was reauthorized for 6 more years on December 31<sup>st</sup>, 2011



# SBIR/STTR Program Descriptions

# Small Business Innovation Research (SBIR)

- A set-aside program for small business to engage in Federal R&D with potential for commercialization
- 2.8% of the extramural research budget for all agencies with a budget greater than \$100MM per year

# Small Business Technology Transfer (STTR)

- A set-aside program to facilitate cooperative R&D between small business concerns and U.S. research institutions with potential for commercialization.
- 0.40% of the extramural research budget for all agencies with a budget greater than \$1B per year



# SBIR/STTR Program Basic Structure

#### Phase I

- Feasibility Study or Prototype
- \$150k Max and 6 Months

#### Phase II

- Full Research and Development Effort
- \$1M Max and 24 Months

#### Phase III

- Commercialization Stage
- Seek External Funding [No Use of SBIR funds]

The program runs as a series of sequential phases.



# Current SBIR Program Eligibility Criteria

Organized for-profit business based in the U.S.

- ✓ 500 employees or less, including affiliates
- ✓PI's primary employment must be with the small business
- ✓ Be a concern which is more than 50% directly owned and controlled by one or more individuals (who are citizens or permanent resident aliens of the United States), other small business concerns (each of which is more than 50% directly owned and controlled by individuals who are citizens or permanent resident aliens of the United States), or any combination of these;



# Current SBIR Program Eligibility Criteria

- ✓Be a joint venture in which each entity to the joint venture must meet the requirements set forth in paragraph (a)(1)(i) or (a)(1)(ii) of this section. A joint venture that includes one or more concerns that meet the requirements of paragraph (a)(1)(ii) of this section must comply with § 121.705(b) concerning registration and proposal requirements.
- ✓ No single venture capital operating company, hedge fund, or private equity firm may own more than 50% of the concern.



# STTR Program Eligibility Criteria

- ✓ Applicant is organized, for-profit small business based in the U.S.
- ✓ Formal cooperative research and development effort
  - ✓ Minimum 40% by small business
  - ✓ Minimum 30% by U.S. research institution

#### ✓ U.S. research institution

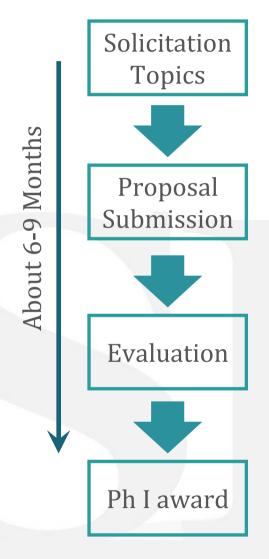
- ✓ College or university
- ✓ Other non-profit research organization
- √ Federal research and development center

# ✓ Intellectual Property Agreement

✓ Allocation of rights in intellectual property and rights to carry out



#### Standard SBIR/STTR Phase I Process



- Agencies describe R&D topics in solicitations at fixed time periods over the year – not rolling.
- Small Business Concerns prepare short (usually 25-page) proposals.
- Unsolicited proposals are not accepted.
- Agencies evaluate based on technical merit, firm's qualifications, and commercial potential / societal benefit
- Agencies make Phase I awards.



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# Program Differences Between Agencies

#### Solicitation Logistics

- Number of Solicitations 2/3 per year with different windows of timing
- Topic Areas broad to focused

### Proposal Logistics

- Proposal Preparation Instructions no unified application process
- Proposal Review Process external peer review or internal review
- Proposal Success Rates vary slightly between agencies

### Award Logistics

- Type of Award contract and grant
- Financial Details indirect cost rates and
- Dollar Amount of Award slight differences



#### Differences Between a Contract and Grant Award

# **Contracting Agencies**

- Agency establishes plans, protocols, requirements
- Highly focused topics
- Procurement mechanism for DOD and NASA
- More fiscal requirements

DOD, DHS, HHS/NIH, NASA, ED, EPA, DOT, DOC

# **Granting Agencies**

- Investigator initiates approach
- Less-specified topics
- Assistance mechanism
- More flexibility

HHS/NIH, NSF, ED, USDA, DOE



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  - New measures to guard against fraud, waste, abuse
  - Increased support for commercialization



# Funding Changes with Reauthorization

#### Set-aside percentages are increased

- SBIR set-aside increased, currently 2.8%
- SBIR share will increase by 0.1 percentage point each fiscal year until it reaches 3.2% for FY 2017.
- STTR set-aside increased, currently .40%
- STTR will increase to 0.45% for 2016 and thereafter.
- Agencies may exceed these minimum percentages.

#### Award Sizes

- STTR award sizes increased to match SBIR amounts: \$150,000 for Phase I and \$1 million for Phase II.
- Awards may not exceed guideline amounts by more than 50% (\$225,000 for Phase I and \$1.5 million for Phase II). Agencies must receive a special waiver from SBA to exceed guideline amounts by more than 50%.



# **Funding Changes with Reauthorization**

#### Admin funding pilot

- Permits agencies to use 3% of SBIR funds for administration of SBIR and STTR programs.
- Funds used to provide new material improvements in performance of the program on critical issues (e.g. streamlining award processes).

#### Technical Assistance

- The amount of SBIR funds permitted for technical assistance raised from \$4000 to \$5000 per award per year.
- This is to be in addition to the award amount for both Phase I and Phase II.
- Awardees may contract this amount to a provider other than the vendor selected by the agency.



#### VC-owned firms

- Firms that are majority-owned by multiple venture capital operating companies (VCOCs), hedge funds and/or private equity firms may receive SBIR awards.
- SBA published a final rule outlining the new requirements on December 27, 2012. The updated rule became effective as of January 28, 2013. Two agencies have opted to participate: NIH and ARPA-E.

#### Company Registry

 All applicants register with Company Registry Database at <u>www.sbir.gov</u> at time of application.



#### Cross Program Awards

- Agencies have the option to allow STTR Phase I awardee to receive SBIR Phase II award and SBIR Phase I awardee to receive STTR Phase II award.
- Implementation is at agency discretion.

#### Cross-agency Awards

• Phase I awardee may receive a Phase II award from an agency other than the one that awarded the related Phase I.

#### Direct to Phase II pilot

- FY 2012-2017 NIH, DoD, and Department of Education may issue Phase II SBIR awards to firms to pursue Phase I solicitation topics without requiring a Phase I.
- Implementation is at agency discretion.



#### Open Phase II competition

- Agencies must allow all Phase I awardees to apply for a follow-on Phase II award. Issuing Phase II awards via invitation only will not be permitted.
- Agencies must include information on the Phase II application process in all Phase I solicitations.

#### Second Phase II

Agencies may award a second, sequential, Phase II to continue a Phase II project.



#### Commercialization standards for Phase I applicants

- *Phase I to Phase II Transition Rate*: Phase I applicants are required to meet agency-specific standards for progress towards Phase II.
- *Phase II to Phase III Commercialization Rate*: Phase I applicants that win SBIR/STTR Phase II awards, are required to meet agency-specific standard of commercialization success from those Phase II awards.



# Streamlining the Award Process

- Streamlining the award process
  - Act requires changes aimed at reducing gaps in time between close of the solicitation and notification of award. Agencies are to implement these measures as soon as is practicable.
  - Policy Directives include new reporting requirements to develop data needed to monitor and analyze time lags



# Data & Reporting with Reauthorization

- Improved Central Data System
  - Facilitate reporting & program evaluation at <u>www.SBIR.gov</u>
- Tech-Net will consist of the following databases:
  - 1. Solicitations Database all solicitations and topics from agencies
  - 2. Company Registry housing company information on all SBIR applicants including specific information on majority-ownership by multiple VCOCs, hedge funds and/or private equity firms
  - 3. Application Information Database on each applicant
  - 4. Award Information Database on each awardee
  - 5. Commercialization Database of SBCs that have received prior SBIR awards
  - 6. Annual Report Database used to generate Annual Report
  - 7. Other Reports Database
- Databases will be designed to minimize reporting burden on small business.



#### Company certifications

- Awardee must certify they meet program requirements at the time of award AND at points during the lifecycle of the award.
- Lifecycle certification was recommended by a working group of Inspector Generals. This does not alter the policy that awardees may complete their SBIR/STTR award even if they no longer meet the definition of an SBC.

### Informational systems

 Agencies must: include on their website, and in each solicitation, a telephone hotline number or web-based method for reporting fraud, waste and abuse; include on the agency's website successful prosecutions of fraud, waste and abuse in the SBIR Program; designate at least one individual to serve as liaison for the SBIR/STTR Program to the Office of Inspector General (OIG) and the agency's Suspension and Debarment Official (SDO); and maintain procedures to enforce accountability (e.g., creating templates for referrals to the OIG or SDO).



# Increased support for commercialization

#### Technical assistance

Amounts increased to \$5000, flexibility on use, applies also to STTR

#### Commercialization Readiness Programs

DoD Commercialization Readiness Pilot is made permanent and includes the STTR program;
 Commercialization Readiness Pilot programs for civilian agencies are authorized allowing agencies to use up to 10% of SBIR/STTR funds to support commercialization and Phase III efforts.

### Phase III preference

 Agencies directed to support SBIR/STTR awardees in their efforts to commercialize SBIR/STTR work through, among other things, Phase III sole-source contracts.



# SBIR Program

# Contact Us

#### **U.S. Small Business Administration**

Office of Technology 409 3<sup>rd</sup> St., SW 8<sup>th</sup> Floor Washington, DC 20416 www.sbir.gov

#### **SBIR.gov Website**

- •Searchable database of open solicitations
- •Information on how to apply
- Links to agency SBIR websites
- •Additional resources and contact information

